

LED package

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Abstract of **TW 495936 (B)**

The LED package of the present invention mainly utilizes silicon chip as the substrate, perform wet etching to form concave slot using the specific orientation of the die surface, and fabricate the through hole electrode by dry etching on the back side of the silicon substrate. Form insulating oxide film layer or nitride film layer on the silicon surface, and coat the reflection layer and the electrode layer, thus an LED using silicon substrate is formed. Dispose the LED die on the silicon slot and perform bonding, wiring, encapsulation, dicing steps to complete the SMD LED product. The present invention utilizes silicon chip as the packaging substrate, which is different from the circuit board or metal frame as the packaging material in the traditional packaging method of LED. The advantage of the present invention is having good heat dissipation, temperature endurance, miniaturized size, etc. which current LED does not possess.

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